## **ABSTRACT**

A magneto-resistive CrO<sub>2</sub> polymer composite blend comprising 90-95% by weight of the polymer preferably Low Density Poly Ethylene, 5-10% by weight of magnetic filler preferably CrO<sub>2</sub> and 2-4% by weight of an additive, prepared by the process of mixing the said polymer, said CrO<sub>2</sub> and said additive in a mortar pestle to obtain a homogenous mixture, the said mixture is heated at a temperature of 95-100°C to obtain a blended melt, the said blended melt is then casted between two metal plates to obtain sheets by applying the pressure.